

# THE JAPANESE LAND REFORM : ITS EFFICACY AND LIMITATIONS

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Land Reform in Japan has been regarded as one of the most successful and drastic in the world. But it has been confronting the new phase of structural problems which requires resolution from the point of view of the long-run prospect of agriculture and national economy.

Policies for establishment of owner-farmers introduced by the reform gave an incentive to high productivity and secured the stability of the farmer's household. However, since the stage of so-called High Economic Growth, the small-scale farming and fragmentary holding of arable land have resulted in a bottleneck to the further development of the Japanese economy.

## I

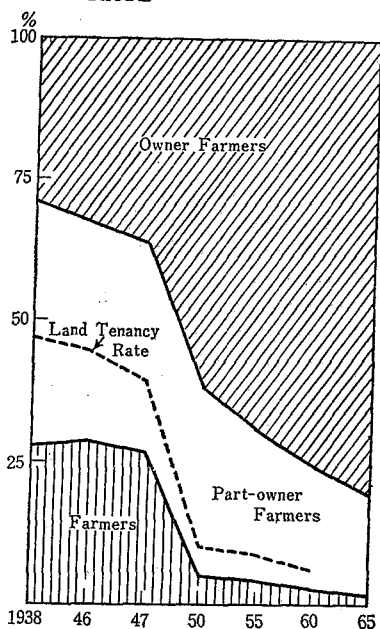
The land reform which was carried out in Japan between 1946 and 1950 may perhaps be said to have been the most successful of the land reforms carried out in many of the countries of Asia and Africa after the Second World War. The Japanese land reform included the strengthening of the rights of tenant cultivators and the fixing of rents at low sums payable in money (not in kind), but these aspects of the reform were essentially secondary in nature and the main content of the reform consisted of the compulsory purchase by the government of the greater part<sup>1</sup> of the land on lease by landlords and its resale to former tenants, thus making the latter into owner-farmers. How thoroughly the conversion of these tenants into owner-farmers was carried out may be gauged by referring to Figure 1.

The Figure shows that tenant farmers, who before the war had accounted for nearly one-third of the total, accounted for 5% by 1950, while part-owner farmers, who had accounted for 40% of the total before the war, accounted for somewhat more than 30%. On the other side, the owners, who before the war accounted for 30% of the total, now accounted for 62%. The same situation is apparent in the light of the land statistics, and we find that land cultivated in tenancy, which before the war had accounted for nearly 50% of cultivated land, had shrunk by 1950 to around 10%.

In addition, we must note in connexion with the Figure that although

<sup>1</sup> In fact, all land on lease by absentee landlords (landlords not resident in the administrative division (city, town, or village) in which the land was situated), and all land in excess of a family holding of 1 hectare (3 hectares in Hokkaidō) in possession of resident landlords, was subject to compulsory government purchase.

**Figure 1. PROPORTIONS OF OWNERS AND TENANTS, AND CHANGES IN THE TENANCY RATE**



Source: *Nōrinshō Tōkeihyō* (Statistics of the Ministry of Agriculture and Forestry).

whatever reason the increase may have taken place, the enlargement of the numbers of owners, which was the principal aim of the land reform, was not only carried out in a most thoroughgoing fashion, but since the effecting of the reform the results produced have by no means shown any tendency to efface themselves, but on the contrary have shown a tendency to expand further and further. Thus today landlord-tenant relations have practically ceased to have any substantial significance, and they have now become a wholly local phenomenon.

When the thoroughgoingness of land reform is called in question it is of course insufficient merely to draw attention to the quantitative increase in the numbers of owners or the area of land cultivated by owners as we have done above. Alongside this matter we must at all costs draw attention to the following two facts.

First, the liberation of the land in this reform was carried out practically without compensation. It goes without saying that in the autumn of 1945, when the land reform was first drafted, the government worked out prices for the purchase of agricultural land on the basis of the price of rice and

the land reform itself was completed in 1950, the numbers of the owner-farmers have been increasing from that time up to the present day. In 1965 owners exceeded 80% of the total, while tenants accounted for less than 2%. We have land statistics only up to 1955, but in that year the land tenancy rate was 6%, and we may suppose that it is now under 5%.

This increase in the numbers of owner-farmers and the area of land cultivated by owners is advancing along the following two paths. The first is the case in which the landlord takes back land which he had leased to tenants and cultivates it himself, and the second is the case in which a tenant purchases the land which he has been cultivating in tenancy. Government statistics indicate that of the increase in the area of land cultivated by owners which took place during and after 1950, approximately one-third was occupied by the former, and two-thirds by the latter. But for

production costs, and these prices were used as standards in purchasing land from landlords and selling it to tenants. The formula for the calculation of land prices which was laid down at this time was thereafter used throughout the whole period of the land reform, but the period of about three and a half years from the autumn of 1945 to the spring of 1949 was a time when a particularly severe inflation was in progress in Japan. To take the single case of the price of rice, the government price for rice, which had been ¥150 (per 150 kg.) when the land prices were worked out, was ¥4,600 in 1949, and more than ¥6,200 in 1950. Thus land prices, which had been fixed with reference to the commodity price levels of the autumn of 1945, became markedly low in practice. Considering matters as they stood in 1950, the government price for average paddy used for rice cultivation and producing a yield of about 300 kg. per 10 ares amounted to no more than about 5% of the yield of the land when converted into terms of rice.

At the time of the land reform the government had made it possible for tenants to pay for land which they purchased by means of long-term instalments extending over 24 years. However, this was entirely unnecessary, since it was possible to obtain land at the cost of only 5% of the annual yield.

In this way the farmers were able to obtain land virtually free of charge, and, as we shall see later, this fact had a great significance for the development of agriculture after the land reform, but from the point of view of the landlords it meant that they were virtually expropriated of their property without compensation. Leaving aside the cases of those landlords who owned forest land which was not subject to the reform or who were investing in undertakings other than agriculture, some millions of landlords who were entirely dependent on income from leased land were deprived of the basis of their livelihood at a single stroke and lost their position as members of the upper class in their villages. It is of course true that a certain section of them were also performing the functions of cultivating farmers, and about the time of the land reform there were not a few who took back, legally or illegally, some of the land which they had leased to tenants, thus enlarging their holdings of cultivated land. Further, the landlords and their children had received a fairly high level of education, and not a few entered intellectual occupations while a considerable number used their knowledge to obtain posts in village offices, agricultural co-operatives, etc. It is therefore not the case that all the landlords were ruined, but it is true that there were some instances of landlords being reduced to pauperism.

We may mention in passing that, as is to be expected, the landlords were much dissatisfied with the measures taken by the government. Thus, even while the reform was still in process of implementation a large number of suits was brought in the courts by landlords who maintained that the land reform was an infringement of the rights of private property or was a contravention of the provisions of the Constitution. In 1956, however, the Supreme Court ruled that the reform did not contravene the Constitution, and the suits brought by the landlords were thrown out. Later, former

landlords began to agitate for the grant of government compensation to those who had suffered as a result of the implementation of the land reform, and to some extent this developed into a political movement of some proportions. Needless to say, public opinion, apart from the former landlords themselves, was in general opposed to such a grant of compensation to former landlords, on the grounds that there was no reason for it. In 1965, however, the government party, believing that the former landlords still possessed some degree of political influence in the villages and seeking to secure their hold on the rural areas, the principal source of their voting-strength, decided to pay the former landlords not compensation, but a sum of money described as a "reward" for their co-operation in the land reform—payable not in cash but in government bonds—and in spite of the opposition of the anti-government parties the measure was carried into effect. It goes without saying, however, that this did not confer any great economic boon on the former landlords, and indeed it is extremely doubtful whether it served to strengthen support for the conservative parties.

However that may be, the fact that the liberation of the land had been carried out in a manner which was virtually a form of expropriation did not only mean that it had great significance in rendering the landlords impotent as a social force. From the point of view of the tenant farmers who had received the benefits of the liberation of the land it meant that they were wholly spared the obligation of paying over a long period for the land they had acquired. To this extent it also implied that they were given some margin with which to enlarge productive investment in their own holdings. In general, when a land reform with compensation is carried out, the tenant farmers, although they can become nominal land-owners, are placed in the position of having to make annual instalment payments over periods of from five to fifteen, or in some cases even twenty years, in respect to the land which they have acquired, and because of this the liberation of the land does not result in the raising of the position of the tenant farmers, but in comparison with this general case the specially distinctive character of the Japanese land reform would seem to be apparent. Again, as far as the influence on the development of Japanese agriculture after the reform is concerned, it is this fact, the fact that the reform was carried out in a manner which was virtually a form of expropriation, which was of greatest significance, rather than the mere fact of the vast scale of the reform.

Second, as a result of the Japanese land reform the tenancy relations on the small remaining area of land cultivated by tenants were brought thoroughly under control. In the first place, the severest restrictions were placed on the landlord's depriving tenants of their land by revoking tenancy contracts at will or refusing renewals. Such action was possible only when the Village Agricultural Land Committee (later the Agricultural Committee) certified the fulfilment of certain conditions—such as that the landlord had the ability to cultivate the land himself and that the tenant's livelihood would not be embarrassed by his handing back the land—and when the Prefectural Gov-

ernor had granted permission on the basis of the Committee's certification. Since these conditions were seldom fulfilled in Japanese agriculture, in which the majority of the tenants were running very small holdings, this virtually meant that once a landlord had leased some of his land to a tenant it would be practically next to impossible for him to get it back, even if he should find that he required the land for himself. From the opposite side, it meant that a tenant farmer, although cultivating land under a lease, had to all intents and purposes as secure a hold on the right to cultivate his land as any owner-farmer.

It need hardly be said that the above relates to the normal presuppositions of the case, and in fact landlords took back land from tenants in greater or lesser measure. This was made possible by the fact that in many cases tenants would be obliged to give back their land when requested to do so by landlords who had long been members of the upper-class stratum of village society, and while as a matter of course the views of landlords would have comparatively great weight in the Agricultural Land Committees, even in cases where this was not so the Committees might well act in a manner sympathetic to the landlords. Nevertheless, it would be best to say that on the whole such occurrence were local and exceptional, and we may take it that the normal presuppositions which we have mentioned above were fairly well maintained.

Further, in regard to rents, not only was all levying of rents in kind forbidden, but the money rents were fixed by the government at low levels. These rents were at first set at ¥75 per 10 ares of average paddy, but were later raised on two occasions in response to the progress of inflation. However, even at the present time these rents are set at somewhat more than ¥1,100, so that on the basis of the present price of rice they are at the level of between 3% and 4% of the total return from the land, and represent an almost trifling sum. On the landlord's side, even supposing him to own the maximum permitted holding of 1 hectare, the income which a landlord can obtain by giving his land out to tenants will amount to somewhat more than ¥10,000, which will not be sufficient to defray his living expenses for half a month. Nor is this all, for at the present day the Real Estate Tax on agri-

Table 1. CHANGES IN RENTS (Japan excluding Hokkaidō)

	Rent per 10 ares (¥)	Average Rent Paid (¥)	Rent as % of Gross Agricultural Income
1957	1,503	1,058	0.36
1958	1,504	1,159	0.39
1959	1,583	1,157	0.37
1960	1,628	1,158	0.34
1961	1,771	1,260	0.33
1962	1,860	1,300	0.30
1963	1,950	1,600	0.33

Source: From *Nōka Keizai Chōsa* (Agricultural Budget Survey) for each year. The rents are the average for rents on paddy, upland, and other land.

cultural land frequently exceeds the rent which can be obtained from it, and it may even happen that it is disadvantageous for a landlord to have land given out to tenants.

On these points also it is a fact that some number of evasions of the law have been observed. In particular, these prescriptions are comparatively well observed in respect to land which has been continuously cultivated in tenancy from before the land reform, but it is said that unauthorized rents are fairly general in respect to land cultivated under tenancy contracts drawn up after the land reform. Nevertheless, if we calculate the average rent per 10 ares for Japan excluding Hokkaidō from the *Nōka Keizai Chōsa* (Agricultural Budget Survey) the figures are no more than those shown in Table 1, and there is no evidence that rents have risen to any marked degree.

In regard to such changes in tenancy relations as we have described above, we may say that the strict control which the government has maintained over tenancy relations by means of the Agricultural Law which was passed after the land reform has been most efficacious. At the same time, however, as we shall mention later, the spectacular growth of the Japanese economy got under way, and it is an important fact that there was a marked lessening of competition for land to be cultivated in tenancy, caused by the marked expansion of opportunities of employment outside agriculture. High rents had been produced in the first place as a result of competition for tenant land from the part of surplus rural population which had no other means of livelihood, and it was natural that with the lessening of competition rents should cease to rise.

The fact that tenancy relations were kept under strict control in this way was of great importance for the land reform in a number of senses. First, it made it economically impossible for landlords to persist as mere landlords, and in combination with the shrinking of the area of land cultivated in tenancy it dealt a decisive blow to the Japanese landlord system. Viewing the same thing from the other side, it reduced to the minimum the negative effects on agricultural management exercised by landlords, granting that some area of land cultivated in tenancy persisted after the land reform. Now that the cultivator's right to the use of his land had been markedly strengthened and that there was virtually no great difference between rents and the Real Estate Tax, whether or not one owned land became for the farmers a matter in which there was practically no substantial difference. However, a fact which was probably of greater importance was that a landlord's ownership of land cultivated in tenancy became nearly meaningless. It was meaningless for a landlord to own land under conditions which involved him in an economic loss, or to go on owning land which he could not easily take back from his tenants and use for his own purposes, not to mention the fact that he could have no opportunity of undertaking entrepreneurial activity with a view to enlarging his holdings of land cultivated by tenants. This situation lay in the background of the continuing tendency for farmers to become owners as the result of land cultivated in tenancy being sold to

tenants, a tendency which continued even after the land reform, as we have noted above.

In this way, then, the Japanese land reform was carried out with a thoroughness scarcely paralleled in history. As a result of it there was built up in Japan a system of cultivating proprietorship which is also scarcely paralleled in history. The development of Japanese agriculture in the succeeding ten and more years has taken place on the stage provided by these events.

## II

What influences were exercised on Japanese rural society and Japanese agriculture by the land reform is a very many-sided question, and it is no simple matter to present an account of the subject which will include all its aspects. Again, as is the case with all social phenomena, the efficacy of the land reform merges with social effects derived from numerous other political and economic trends, and it is no simple matter to delineate clearly the bounds of the efficacy of the land reform.

In the present paper we shall refrain from going deeply into the most important aspect of the land reform, namely, the political efficacy of the land reform, but shall merely put forward the following suggestion. We would suggest that the efficacy of the land reform lay in diverting at a stroke into the direction of a tranquil state the farmers' movement which was already fairly well developed before the war and which burst fiercely into flame after the war. It was of course the case that in terms of slogans the farmers' movement included many demands in its political platform, beginning with such ideas as opposition to war or the democratization of Japan, and extending to demands for better prices for rice and opposition to heavy taxation, but the heart of the farmers' movement always remained the land question. To express it in other words, the farmers' movement was begotten from the explosion of the petty bourgeois demands of the part-owner farmers and tenants vis-à-vis the landlords that they should be allowed to own land, or, failing that, should at least have security of the right of cultivation and low rents. However, those who expressed such views now had their demands more or less completely satisfied by the land reform.

This quietening down of the farmers' movement, however, did not merely bring about peace in rural society. Up to this time the farmers' movement had links in greater or lesser degree with the socialist movement, and since it was the stronghold of the socialist forces in rural society the quietening down of the farmers' movement also meant the collapse of the socialist forces in the country-side. The fact is that since the time of the land reform up to the present the socialist and communist parties have been unable to maintain satisfactory party organizations in the rural areas, and at election times they have been able to do no more than collect a few floating votes. Today the rural areas are still the greatest supporters of the conservative parties, and

we may be justified in saying that in a certain sense this is the most important result produced by the land reform. In the case of Japan there is now no room for the use of a tactic which has been employed in China and the countries of Southeast Asia, where socialist parties have pursued the policy of gaining the support of the peasantry by promising them the liberation of the land. We may say that the role which the land reform performed for the ensuring of the stability of the Japanese capitalist order may have been greater than we imagined.

We shall also refrain from a detailed discussion of the sweeping changes in the social structure of the villages and the great changes in the consciousness and behaviour of farmers which were caused by the land reform. It is of course true that the power of the landlords in the villages had been gradually declining for some time before the land reform. But in spite of this the presence in the villages of a landlord class living off high rents and distinctly superior in regard to property and education, and, on the other side, the existence of a large number of poor tenant farmers who would have their land taken from them and be reduced to beggary on the following day if once they offended their landlords, were the cause of feudal ideology, emotions, and customary practices remaining deeply rooted in rural society. The virtual disappearance of the landlords as a result of the land reform was of great efficacy in sweeping away these old social relations. It is certainly true that even today a considerable number of the influential persons in village society, such as the village headman, the members of the village council, and the head of the agricultural co-operative, are drawn from the former landlord "class." Their tenure of these posts, however, is due to their prior education and experience, and is not due to the social position or remaining glory attaching to the status of a landlord.

It need hardly be said that what may be described as the tradition of social living or established custom is scarcely to be changed in so short a time. We may also suppose that there is another side to the question, the fact that the backward system of production itself, which was originally based on production centred on hand tillage by small producers, obstructs the modernization of the farmers' consciousness. Consequently, it is not surprising that feudal ideology and customary practices should have remained in rural society after the land reform, and we would expect that with the change of generations and the advance of agricultural technology such things will naturally fade away. Yet it would seem to be an undeniable fact that on the whole the modernization and urbanization of the social structure of the village and the consciousness of farmers in the last ten or fifteen years has proceeded at a speed which has astonished all eyes. Many reasons can be given for this—the democratic development of Japan as a whole, the spread of education, increased contacts with the cities, the influence of mass communication, etc.—but it is probable that few would be found to dispute the inclusion of the land reform among the most important causes of it.

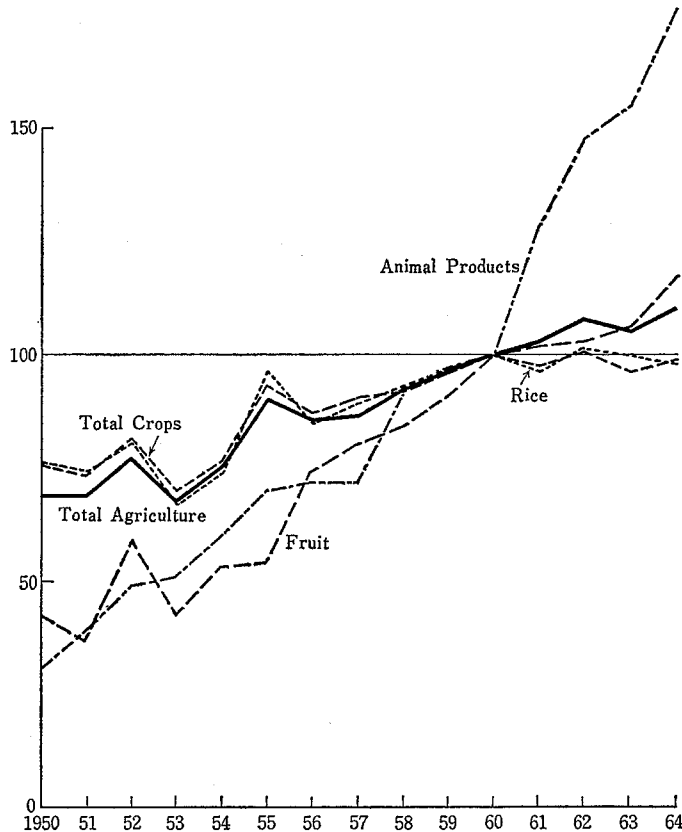
For our present purposes, however, let us concentrate our attention on



economic questions. In doing so, the points which we must at all costs raise are the two following.

First, the land reform possessed great efficacy in relation to the subsequent development of Japanese agriculture. Figure 2 shows the changes in agricultural production which have taken place in recent years. As can be seen from the Figure, there is some difference between the development which has taken place in the products of crop husbandry and that which has taken place in the products of animal husbandry, for the former is of a more static character when compared with the explosively rapid growth of the latter. Since 1960, in particular, the products of crop husbandry have been static or show a tendency to decline slightly. As we shall see later, there is an important question here, but leaving it aside for the moment we may note that during this period agricultural production as a whole increased at a fairly rapid rate. The rate of growth is more than 4%, and although it indeed appears low when viewed in relation to the growth rate of the Japanese economy as a whole, which has been growing at an annual average rate of

Figure 2. AGRICULTURAL PRODUCTIVITY INDEX (1960=100)



Source: *Nōrinshō Tōkeihyō* (Statistics of the Ministry of Agriculture and Forestry).

10% or more since 1955, the fact is that it is exceptionally high when compared with the agricultural growth rates of many other countries.

What is more, it is not only a case of the total growth rate being high. A rapid rise in national income levels has been brought about under the high growth rate economy, and in the field of food consumption this has produced a rapid increase in the quantities of animal products and fruit consumed. Agriculture has also responded to this situation, for these branches of agricultural production, which had hitherto been comparatively weak, have now been rapidly enlarged, and have been keeping up well with the increase in demand which until quite recently was so strong as to produce marked shortages, especially of beef. Animal products have increased by six times within the last ten to fifteen years while the production of fruit has increased by three times, and such growth may justifiably be described as astonishing.

Further, it is noteworthy that these increases in production have not been brought about by an increase in the agricultural population—by what may be described as “human sea” tactics—but to the accompaniment of a decrease in working population which is unprecedented in Japanese history. The agricultural population has declined throughout the period, and in particular under the high growth rate economy since 1955 agriculture has lost many of its working hands, this being a reflection of the sudden swelling of non-agricultural employment. The approximately sixteen million persons engaged in agriculture in 1950 became fifteen million in 1955, and twelve million in 1960. Since during this period there has been a marked out-migration from agriculture among the lower age groups a rapid ageing of the agricultural population is in progress.

Since these increases in agricultural production took place under such conditions of rapidly declining working population it is self-evident that these increases in production could have taken place only when background conditions were present which would permit innovation in agricultural technology and a consequent rapid rise in the productivity of labour. In fact, the ten to fifteen years following the land reform were a period in which innovation in agricultural technology advanced at a rate which was almost unprecedented in the history of Japanese agriculture.

It is of course true that this innovation in agricultural technology was very many-sided in content. It is also sure that there was a fairly marked development of the types of agricultural improvement which had played important roles in the development of Japanese agriculture before the war—improved varieties of seed, the use of new fertilizers or increased applications of fertilizers already in use, and a multitude of small improvements in cultivation techniques. However, considering the case of rice cultivation first, it is probable that none would object to our listing the appearance on stage of new agricultural chemicals and their diffusion throughout the country, the development of methods of cultivation employing vinyl plastics, and the advance of mechanization as being the innovations which particularly charac-

terized the innovation in technology which took place after the war. Further, among these the last, mechanization, was of greatest importance, particularly from the point of view of raising the productivity of labour. Mechanization was not only introduced into rice cultivation, but also into fruit growing and animal husbandry on a wide scale, promoting the enlargement of production in these branches of agriculture.

From Table 2 we can gain some idea of the speed at which mechanization advanced. In particular, cultivation machinery centred on small tractors increased by 20 times during this period, and today close on 90% of farmers who cultivate paddy are using such machinery. Even today, however, there is still some hand labour left, since the mechanization of the transplanting and harvesting stages of rice cultivation has not taken place, but lately sowing by tractors and by helicopters and harvesting by combine harvesters have been introduced into rice cultivation, and an approach is being made to the stage of undertaking the complete mechanization of rice cultivation.

In cultivation of general upland crops, in fruit growing, and in animal husbandry, mechanization is still, of course, at a lower stage. However, in the animal husbandry branch of agriculture there has been a marked diffusion of large-scale cage feeding, and the introduction of milking machinery is fairly well advanced. On the fruit growing plantations there has been a marked introduction of "speed sprayers" and fixed pipe-line installations, as well as the laying down of cable lines and agricultural roads for tractors. Further, we must not lose sight of the fact that although there is still a fair amount of hand labour left in these branches of agriculture a large expansion of production in these branches has been made possible by the possibility of large economies of labour resulting from the mechanization of rice cultivation. At all events, we can see from this that in the last ten years Japanese agriculture has received its baptism of "tractorization."

When we consider what made possible such innovation in technology, we can of course list a large number of governing conditions. As representative of them we may cite the development of agricultural research itself, the perfection of the technological extension organization centred on the government's Agricultural Improvement Extension Personnel System, the importation of new agricultural chemicals and their manufacture in Japan, the improvement in efficiency and cheapening of the prices of agricultural machinery which accompanied the development of the automobile and machine industries, the spread of education and the development of communications, the sharpening of the labour shortage as an accompaniment to the efflux of labour from agriculture, and the development among farmers of a mentality which seeks the reduction of labour, etc. In considering these in relation to the land reform, however, the following two points must on no account be omitted.

(1) We would first consider a point which we will touch on later, the farmers' desire and ability to invest. As regards the farmers' desire to invest, in a certain sense this was the result of "the magic of ownership," as it has

been called since the times of Arthur Young. In more concrete terms, however, it would seem that the facts which were of importance were that tenant farmers, who hitherto had had half of the returns which they had wrested from the land taken from them by their landlords, now came to believe that they could improve their standards of living by their own efforts, and that whereas formerly the greater part of tenant farmers were forced to carry on part-time non-agricultural occupations in order to obtain income with which to defray the expenses of their rents and consequently were unable to devote themselves whole-heartedly to agricultural production, it now became possible to some degree for them to do so. To this we must add

**Table 2. NUMBER OF POWERED AGRICULTURAL MACHINES OWNED PER FARM HOUSEHOLD**

(Unit: 1,000)

	Powered Cultivators	Engines	Powered Threshing Machines	Powered Sprayers	Speed Sprayers
1951	18	382	972	20	—
1956	141	1,476	2,210	—	—
1961	1,020	1,673	2,702	232*	—
1964-65	2,156	1,903	3,085	494	2.8

Note: \* 1960

Source: *Statistics of the Ministry of Agriculture and Forestry.*

**Table 3. INDEX OF INVESTMENT IN CAPITAL GOODS FOR AGRICULTURAL PRODUCTION**

(1934-1936=100)

	Total	Fertilizers	Feeding Stuffs	Agricultural Chemicals	Agricultural Machines and Implements
1951	106.4	79.6	42.9	190.0	212.5
1952	123.9	93.2	58.1	319.1	261.8
1953	151.8	104.7	81.5	505.2	290.3
1954	174.6	112.2	86.1	618.0	293.3
1955	190.1	122.8	94.9	678.8	320.5
1956	197.5	128.3	114.0	824.1	315.5
1957	191.2	136.0	98.9	1,041.7	492.5
1958	199.0	141.2	101.6	1,270.0	544.9
1959	224.1	148.6	119.5	1,479.0	595.1
1960	262.1	157.0	150.0	1,740.0	689.8
1961	276.1	157.9	192.0	2,078.0	975.0
1962	340.2	172.0	252.1	2,641.0	1,000.1
1963	380.5	179.0	312.5	3,278.0	1,139.0
1964	439.0	187.6	372.0	3,835.0	1,385.0

Note: The index figures have been arrived at by converting the average investment per household to base-year prices by means of the appropriate price index.

Sources: Calculated from the *Agricultural Budget Survey* and the *Rural Price Indices*.

that of late these effects have markedly weakened, and to this point we shall refer again. Again, in regard to the ability to invest, we may first point out that the burden of rent had disappeared, and that the incomes of the farmers had been increased to that extent. At the same time, of course, this raised the level of consumption among the farmers, and since it operated as a factor expanding the propensity to consume it is not the case that all the reduction in rents was put into investment. But even so the enlargement of farmers' investment was very marked, as is shown in Table 3, and it is scarcely to be denied that it was sustained by an enlargement of the farmers' ability to invest of the kind which we have supposed.

(2) Together with these, fixed investment in the land itself, in the form of a marked enlargement of investment in land-improvement schemes, is important. In agriculture, as is well known, practically every innovation in technology must presuppose land-improvement works. For example, such a technique as increased applications of fertilizers will not produce results unless it is accompanied by drainage facilities. However, particularly in the case of an agriculture such as Japan's, which is centred on the cultivation of paddy, matters will not go well when innovation in technology of the "tractorization" type which we have described above is got under way, unless it is accompanied by the provision of agricultural roads, the rationalization of plots, the complete provision of irrigation and drainage facilities, etc.

It goes without saying that since land-improvement schemes involve vast investments and large-scale agricultural engineering works, they can scarcely be got under way without financial assistance from the government. In this situation, the government has been devoting around approximately one-third of its expenditures in respect to agriculture and forestry in each year to assistance for land improvement schemes (approximately ¥100,000,000,000 in 1963), and has been striving to help their completion. It need hardly be said that in parallel with this there must be some power to invest on the side of the farmers, and on this point the long-term low-interest loans provided by the government have played an important role.

A more important fact, however, is that for the purposes of such long-term fixed investments the farmers are given security of the right to cultivate their land. It is quite out of the question to carry out such investments under conditions in which the farmers may at any time be required to return their land to their landlords. Further, since land improvement works must be carried out in units of a considerable area, it may well happen that if land cultivated by tenants is included in the land to be improved this will make it impossible to carry out the particular scheme as a whole. It is a matter of extreme importance that the land reform completely removed such obstacles to land-improvement from the part of land tenure.

Land improvement schemes showed a fair degree of development after the land reform, and this lay in the background of the results produced in such a year as 1964, which we may take as an example—irrigation and drainage works covering 106,000 hectares, other land-improvement works

covering 37,000 hectares, and 717 kilometers of agricultural roads.

Even today, of course, we must agree that land-improvement is still incomplete, but we may be right in thinking that as far as the paddy in the plains is concerned nearly half has now been improved. The "tractorization" which we have described above has also developed on this basis.

Secondly, the other economic effect of the land reform which we must mention is the effect which it has had on the economic condition of the farmers. The point should be clearly apparent from Table 4. Taking the average Japanese farmer and considering first the pre-war owner-farmers as yet unaffected by the land reform, we find that agricultural incomes have risen to a fair degree, but that expenditures have also increased markedly. The result is that agricultural incomes have in fact declined, rather than increasing. In these cases, the instances in which agricultural incomes have risen are principally due to increases in yields or to increased returns from branches of agriculture which have little connexion with the land (such as poultry and pigs), for the areas of the holdings at the two points in time are more or less the same. On the other hand, the increase in running expenses is not at all due to rents, but is due to the marked increase in invested capital goods, as shown in Table 3. Thus we may conclude that since the income from agriculture is reduced to this extent the income rate has declined, thus lowering income.

In spite of this, however, we find that disposable income has risen by more than 60%, and the level of domestic expenditure by nearly 80%. It is

**Table 4. COMPARISONS OF FARMERS' BUDGETS BEFORE AND AFTER THE WAR (¥)**

		Average 1934-1936		1961	
		Owners	Tenants		
Income	Agricultural	Returns	840	773	979
		Expenditure	248	412	478
	Income		593	361	501
	Non-agricultural Income		311	170	796
Total		804	531	1,297	
Expenditure	Taxes and Imposts		67	19	103
	Rent		(16)	(223)	(3)
	Interest		(11)	(17)	(10)
Disposable Income		737	512	1,194	
Domestic Expenses		637	489	1,133	
Surplus		99	23	61	
Cultivated Area (ares)		85	87	81	
Number of Persons in Family		5.2	5.6	5.6	

Note: Converted to 1934-1936 prices. The sums included in rent, taxes and imposts, agricultural expenditure, domestic expenditures, etc., are given twice. Hokkaidō not included.

Source: Calculated from the *Agricultural Budget Survey*.

clear that this is derived from an increase in income from part-time non-agricultural occupations. We may therefore be justified in supposing that in the case of the proprietors the improvement in standard of living after the war has been due principally to increased opportunities of employment in part-time non-agricultural occupations and to increased income from this source.

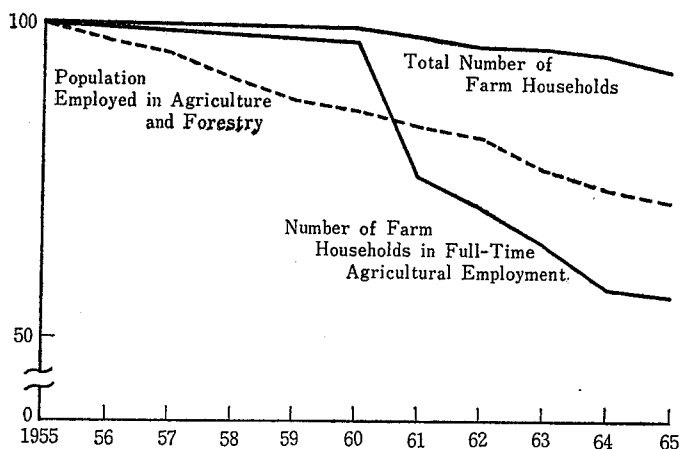
In the case of the tenants, however, the fact that agricultural expenditure has become relatively small and that the income rate has risen from 46.6% to 51.3% has played an important role. As need hardly be said this situation is due to the fact that there has been a sharp reduction in the burden of rents, and as a result the former tenants have been obtaining agricultural incomes which are about 40% greater since the end of the war, although at the same time their actual running expenses have been greatly increased. Together with income from part-time non-agricultural occupations this has raised their level of consumption by 2.3 times, and has made it possible for them to have a surplus which is nearly three times what it was.

At this point we must note the following for reference. The consumption level of the peasants had indeed risen in this fashion, but it is still very low in comparison with that of city workers. The difference is difficult to calculate accurately, but it is usually said to be round about 20%. Consequently, while it is undoubtedly true that the recent marked dependence of the individual farmer economy on part-time non-agricultural occupations is of course due on the one hand to the marked enlargement of employment opportunities outside agriculture offered by Japan's high growth-rate economy, on the other hand we may say that it is also due to the fact that in spite of the land reform farmers have been obliged to seek employment in part-time non-agricultural occupations because agricultural incomes have not risen to a degree sufficient to assure them of the levels of consumption they find necessary. Here, indeed, lie concealed causes which may be productive of great questions.

### III

We have already shown that since 1955 agriculture has rapidly lost population within the framework of the high growth-rate economy. Although in itself this reduction in agricultural population is to be welcomed by agriculture, there is no particular reason for it to cause embarrassment. It is of course true that this efflux of population from agriculture is concentrated in the lower age groups and among the more able members of the agricultural population, and consequently it is not the case that it raises no problems for the development of agriculture, since the population left in agriculture is progressively ageing. Hitherto, however, rural Japan has been burdened by a vast surplus population, so that on the one hand this has made impossible the enlargement of the size of the individual holding and consequently has stood in the way of the adoption of technology which would raise the prod-

**Figure 3.** TREND OF NUMBERS OF FARM HOUSEHOLDS, NUMBERS OF FARM HOUSEHOLDS IN FULL-TIME AGRICULTURAL EMPLOYMENT, AND AGRICULTURAL POPULATION (1955=100)



Note: The enclosed dates are years in which an Agricultural Census was taken.

Source: Based on the *Labour Survey* and *Statistics of the Ministry of Agriculture and Forestry*.

activity of labour, while on the other hand we may suppose that the decline in the agricultural population is more likely to have provided occasions for the development of agriculture, since the presence of surplus population performed the function of depressing agricultural incomes and the farmers' standard of living.

Nevertheless, as we see from Figure 3, the direction in which the situation is developing is not necessarily a desirable one. The agricultural population has declined sharply by somewhat more than a quarter in the last 10 years, but the number of farm households has declined only by about 7%. Further, it is the full-time agriculturalists alone who have practically reduced their numbers to almost half.

We will probably at once imagine that the following developments lie in the background of these changes. First, as we have already noted, those who leave agriculture are predominantly in the lower age groups, but when they leave their villages it is certainly not the case that they take their parents and the other members of their families with them. It is more usual for them to leave their villages alone, and for their parents to remain behind as farmers. What is more, a fair proportion of them—especially eldest sons do not leave the household at all, but travel to and from their new place of work as commuters. In such cases it is usual for the young wife to engage in agriculture as well as the parents. As between these two forms—village-leavers and commuters—the latter have tended to become relatively more and more numerous in recent years, and in 1964 53.5% of the 890,000 persons



from farm households who took up other permanent employment were commuters.

In addition to these, there were many engaged in agriculture who went out to work on a seasonal basis, principally in the building trade and other occupations during the winter. In government statistics these numbered 287,000 persons in 1964, but the accepted view is that in fact they amounted to nearly a million. As far as the statistics are concerned, this type of outgoing population is included among those who are engaged in agriculture and so has no direct connexion with the decline of the agricultural population, but the increase in the numbers of such persons has a considerable effect on agricultural production in various ways, by causing the preparations for agricultural operations to be inadequate or lacking, by making it impossible to carry out agricultural operations at the correct times, and by leading to the abandonment of winter work in agriculture.

At all events, if we think with this type of population movement in the background, we will probably be able to imagine why the number of farm households refuses to decline although the agricultural population is declining, and why a sharp increase is taking place in the numbers of part-time farmers alone. Of course, in a certain sense this may be considered natural. The middle and higher age-groups employed in agriculture hitherto are not going to embark on a change of occupation all at once, just because the way has now been opened to more profitable forms of employment outside agriculture. Hence it is a fact common to many countries that the decline in the number of farm households happens only some time after the younger age groups have rejected agriculture, at the time of the hand-over from one generation to the next. Again, the increase in the numbers of commuters under circumstances such as those of recent times, in which communications have developed and factories are being established in the provinces, and in which there is a housing shortage in the cities which makes it difficult for them to receive new population is also a fact which is common to many countries.

But even so it is no mistake to suppose that this situation is not desirable for the development of agriculture. By this we mean that this failure of the numbers of farm households to decline will become, on the other hand, a serious obstacle standing in the way of those farmers who wish to grow as farmers by enlarging the size of their holdings. This is because they will be required to pay very high prices for land if they try to get possession of land owned by part-time agriculturalists. Again, this obstruction of the enlargement of the holding may also be expected, on the one hand, to have the effect of blocking any higher development of technology centred on the full-time agriculturalists, that is, any raising of productivity. As need hardly be said, this is because the introduction of advanced technology, and in particular the introduction of mechanized technology centred on "tractORIZATION," requires holdings of above a certain size. On the other hand, if there is no rise in productivity resulting from an increase in the size of the holding it will be difficult to bring about an increase in agricultural incomes,

so that under the circumstances which we have noted above, in which there is a strong demand for the raising of levels of consumption, this will have the contrary effect of driving into part-time occupations in search of income even farmers such as these who possess some capacity for growth. In this way the very fact of the stubborn persistence of this large quantity of part-time agriculturalists is a drag on development by the full-time agriculturalists, and has the effect of bringing all agricultural holdings into a condition of decline and ruin.

Nor is this all. If it should come about that there is a large proportion of farmers who have little interest in agriculture, in such matters as land-improvement schemes, in the communal use of machinery, in communally organized pest-control, or in the carrying out of rice transplanting and other operations on a communal basis, or who find themselves unable to summon up any desire to invest in agriculture, then the whole body of farmers will get out of step. That being so, it will also be an obstacle to the development of the holdings of the full-time agriculturalists. To make matters worse, these part-time agriculturalists are accustomed to organize their holdings so that they may withdraw from cultivation as much as possible, provided only that they assure themselves of their own food-supply, with the result that the land which they cultivate is of low productivity, and consequently eventuates in a great loss in the utilization of land resources from the point of view of the National Economy.

We may be able to close our eyes to such evils at a time when the National Economy has margin to spare. Although such confusion and evils may arise only temporarily, we must expect that some years or tens of years hereafter there will be a sudden reduction in the numbers of farm households as a result of the hand-over from one generation to the next. On the other hand, if agricultural production drops and prices rise, then agricultural incomes will be increased. If this happens there is no doubt that large holdings (however small their relative numbers may be) will grow up, and will be run as modernized, high-productivity holdings. We are prepared to think that we should wait for this to happen, and that there is no special necessity for making various dispositions beforehand at the level of political policy. Even so, it goes without saying that in the case of Japan there is a marked efflux of population from agriculture in the form of commuting workers, as we have noted above, and we find some number of cases in which those who have left their villages to take up employment return to their villages when their parents have reached retirement age, and continue their outside employment as commuters. Consequently, we are not entirely free from doubt as to whether the number of farm households will in the event fall sufficiently when the hand-over to the next generation arrives. Again, we may suppose that even if the number of farm households declines there will be a problem in the fact that in Japanese agriculture, in which the number of farm households has always been high in relation to the cultivated area and in which a vast number of minute holdings has predom-

inated, it will be no easy matter to find the area of land which will be needed for the growth of farmer holdings to the required size. But if we grant that we can afford to wait to see how the situation develops there is no reason why even this problem should be considered a serious one. We are of this opinion because no matter how many part-time agriculturalists there may be it will be sufficient if they are getting a fair income and have their standard of living stabilized at the level to which they are accustomed.

At the moment, however, the situation has become more strained. More than anything else, as can be seen from Figure 2, this has been due to the beginning of a falling-off in the rate of growth of agricultural production and a consequent marked shortage of food-stuffs. The growth of production represented in Figure 2 has been chiefly sustained by the growth of the animal husbandry and fruit-growing branches of the industry, while cereal production, centred on rice, wheat, and barley, has tended to decline. However, even in the case of animal husbandry, however prosperous the pig-rearing and poultry branches may be, the growth of dairy farming is falling off and conditions of supply and demand are becoming progressively more pressing, while in the case of beef cattle a sudden recession is continuing. In the case of fruit trees, too, the effects of the greatly increased planting carried out four or five years ago are now making themselves felt, and the growth rate of new planting has fallen markedly. For these reasons Japanese agricultural production as a whole shows, if anything, a declining tendency, and the cause of it, as need hardly be said, lies in the marked "shortage" of agricultural labour. Of course, it is not an absolute shortage. It is only a shortage which has developed within the structure in which a rise in the productivity of the land has been blocked for the above reasons, in which the productivity of the land has declined because of the less intensive methods of land utilization employed by the part-time farmers.

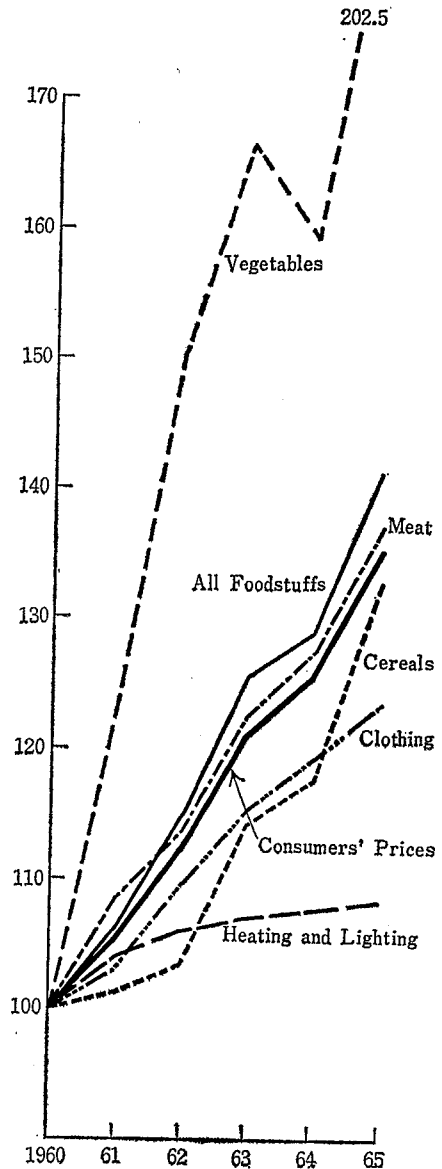
This shortage is causing all manner of repercussions throughout the Japanese economy. Firstly, it is causing marked rises in the prices of agricultural products, centred on vegetables, beef, milk, etc., and is rendering the price situation in Japan more serious. Even in the case of such a product as rice, which is under government control, the consumer's price has been raised because it has been found unavoidable to authorize a rapid rise in the producer's price, and the financial deficit involved is increasing. As can be seen from Figure 4, the rises in the prices of vegetables and other agricultural products have been particularly marked, and have taken the lead in a general price rise. Secondly, imports of agricultural products increased markedly. These rose from \$800,000,000 in 1962 to \$1,800,000,000 in 1964, and in 1965 were approaching \$2,000,000,000. If the present trend is continued it would appear that within four or five years these imports must reach the level of 30-40 hundred million dollars. This increase in agricultural imports is a problem because of the pressure it exerts on Japan's international balance of payments, but a more serious problem is the fact that Japan's imports, whether of rice, meat, or animal feeding-stuffs, are causing strains in world

supply and demand relations, leading to marked rises in prices.

Thus at present Japanese agriculture is again confronted with the important task of increasing domestic agricultural production, and government agricultural policy has also been more and more obliged to tackle this problem head-on, but the central problem here is the means by which a rapid reduction of the numbers of the part-time small-scale cultivators may be brought about. In the light of the economic situation of the individual farm household as we considered it above, the efflux of population from agriculture is likely to continue in the future, and there is no doubt that more than anything else Japan's entry into the period in which the numbers of graduates from the post-war educational system decline year after year will bring about a further fall in the agricultural population. It must be clear to all that when this happens it will be impossible to increase production without a rise in productivity of a very special order, based on the enlargement of the scale of the individual agricultural holding.

Looking back once more at the land reform with these problems directly before us, we find it natural that while it is recognized that the reform was efficacious in the ways we have described, an appreciation of the land reform is now made in which it is seen as having begun to lay fetters on Japanese agriculture, rather than liberating it. For if a large number of farmers had not become proprietors the majority of them might well have forsaken

**Figure 4.** URBAN CONSUMERS' PRICE INDEX (1960=100)



Source: Prime Minister's Office, *Retail Price Survey*. Figures for 1965 are averages up to November.

agriculture and left the land. Again, if the farmers were more free to lend and borrow, those farmers who happened to be faced with a shortage of labour would find it easy to lease their land, even if they did not go so far as to sell all or part of it. We have grounds for thinking that if this were done it would provide room for the enlargement of the holdings of full-time farmers by the acquisition of leased land.

As regards the former case, although we may agree that it may have been the case that such a situation existed, it is now far too late to do anything about the matter. Consequently, as a matter of concrete political policies it is the latter which is in question. At present, under the Agricultural Law it is practically impossible for a farmer to get back his land once he has leased it, and the rent which he can draw from the land is kept at a low level. In these circumstances it is natural that farmers who have land to spare are not inclined to lease it, and so one comes to the conclusion that the restrictions imposed by the Agricultural Law should be relaxed and the liquidity of agricultural land increased.

This contention seems to enjoy fairly powerful support, but on the other hand, of course, the opposite opinion is held to some extent—that it would be undesirable because if this were done the results produced by the land reform would crumble away, and it would lead to the reappearance of the old landlord-tenant relations.

However, this latter opinion would not seem to be so well founded. The landlord-tenant relations of former days were formed under the conditions of a huge accumulation of surplus population in the villages and fierce competition among prospective tenants, but today these conditions are entirely different.

Nevertheless, we must have doubts about the validity of the opinion that since this is so, if the framework of the Agricultural Law were relaxed the liquidity of land would increase and the problem would be solved. As we have seen already, under present conditions the development of agriculture cannot be looked for unless huge sums are invested in land-improvement schemes, but these investments cannot be carried forward without long-term security of the right to cultivate the land. Consequently, legal measures which would weaken the right to cultivate the land and would allow landlords to take back their land from tenants would run counter to the basic line of development along which agriculture must progress, and even supposing that such measures were enacted, it is more likely that persons who wanted to become part-time agriculturalists—the second and third sons in farm families, etc.—would become tenants on a short-term basis and be an obstacle to the development of agriculture, rather than that the land should be taken up by farmers who desired to develop along truly full-time lines.

Viewing the matter in this way, we see clearly that the problem does not consist in the land reform or the system of relations which it produced. It is really meaningless to criticize the land reform on the grounds that it was a mistake to produce a vast number of small proprietors. Since at the

time of the land reform the economic and technological conditions for the enlargement of the size of the individual holding did not exist there was no alternative but to create a large number of small-scale proprietors. Moreover, since the development of agriculture to date is in itself, as we have shown above, one of the results produced by the land reform, to postulate the case of there having been no land reform, or of the land reform having been carried out differently, is really devoid of meaning.

Further, the problem of the present day will not be solved merely by destroying the presuppositions of the land reform and allowing for the expansion of land held in tenancy. In solving this problem a greater priority should be attached to facilitating withdrawal from agriculture as an occupation by providing an environment which will give manufacturing labourers a stable livelihood without need of support from part-time agriculture, accomplishing this by means of the improvement of conditions of employment outside agriculture and by the fullest provision of social security. But considering it as a question of land tenure, it is necessary, on the one hand, to have a policy for the purchase of the land of farmers who are in a position to leave agriculture which will assure them of the most advantageous prices possible, and on the other hand, to have a policy for selling the land to full-time agriculturalists under such conditions that the high price of the land will not be an excessive burden to the running of their holdings, that is, assuming a two-price system to be unacceptable, by making it possible for the purchaser to pay for the land by low-interest annual instalment payments over a markedly long period. Without this it will be impossible to press towards a solution of the problem, and these measures will not destroy the results produced by the land reform, but will rather mean that they will be advanced still further.